

Title (en)  
OPTICAL RELAY AND CONTROL METHOD FOR OPTICAL RELAY

Title (de)  
OPTISCHES RELAIS UND STEUERUNGSVERFAHREN FÜR OPTISCHES RELAIS

Title (fr)  
RELAIS OPTIQUE, ET PROCÉDÉ DE COMMANDE DE RELAIS OPTIQUE

Publication  
**EP 3358761 A4 20180919 (EN)**

Application  
**EP 16850619 A 20160915**

Priority

- JP 2015190597 A 20150929
- JP 2016004217 W 20160915

Abstract (en)  
[origin: EP3358761A1] In order to provide a compact and low power consumption optical repeater capable of amplifying a plurality of wavelength ranges, the optical repeater is provided with: an excitation means which generates excitation light in a single wavelength range; a first light amplification means which is excited by the excitation light and the amplification band of which is a first wavelength range; and a second light amplification means which is excited by the excitation light and the amplification band of which is a second wavelength range different from the first wavelength range.

IPC 8 full level  
**H04B 10/291** (2013.01); **H04J 14/00** (2006.01); **H04J 14/02** (2006.01)

CPC (source: CN EP US)  
**H01S 3/06754** (2013.01 - EP); **H01S 3/094061** (2013.01 - EP); **H01S 3/2383** (2013.01 - EP); **H04B 10/291** (2013.01 - US); **H04B 10/294** (2013.01 - EP); **H04B 10/2972** (2013.01 - EP); **H04J 14/00** (2013.01 - US); **H04J 14/02** (2013.01 - US); **H04J 14/0221** (2013.01 - CN EP US); **H01S 3/094053** (2013.01 - EP)

Citation (search report)

- [Y] EP 1130820 A2 20010905 - FUJITSU LTD [JP]
- [XY] MARS NING GUO A ET AL: "Bidirectional C+L band hybrid amplifier for 16-channel WDM PON transmission at 10Gb/s", OPTOELECTRONICS AND COMMUNICATIONS CONFERENCE (OECC), 2010 15TH, IEEE, PISCATAWAY, NJ, USA, 5 July 2010 (2010-07-05), pages 262 - 263, XP031764856, ISBN: 978-1-4244-6785-3
- [XY] FUJIWARA MASAMICHI ET AL: "Compact bi-directional EDFAs to support extended power budget class of TWDM-PON", 2015 EUROPEAN CONFERENCE ON OPTICAL COMMUNICATION (ECOC), VIAJES EL CORTE INGLES, VECISA, 27 September 2015 (2015-09-27), pages 1 - 3, XP032819964, DOI: 10.1109/ECOC.2015.7341661
- See also references of WO 2017056438A1

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EP3920345A4; US11990726B2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3358761 A1 20180808; EP 3358761 A4 20180919; EP 3358761 B1 20240320**; CN 108141283 A 20180608; CN 108141283 B 20200728; CN 111669225 A 20200915; CN 111669225 B 20230414; JP 2020074537 A 20200514; JP 6642583 B2 20200205; JP 6965918 B2 20211110; JP WO2017056438 A1 20180726; US 10581551 B2 20200303; US 10958370 B2 20210323; US 11463190 B2 20221004; US 2019052390 A1 20190214; US 2020145122 A1 20200507; US 2021203431 A1 20210701; WO 2017056438 A1 20170406

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**EP 16850619 A 20160915**; CN 202010643504 A 20160915; JP 2016004217 W 20160915; JP 2017542717 A 20160915; JP 2019236741 A 20191226; US 201615761449 A 20160915; US 202016733326 A 20200103; US 202117178896 A 20210218